HAPPENINGS at the SAB

...ensuring a solid technical basis for environmental protection

Volume E5 Number 6 June 2000

"HAPPY BIRTHDAY, DEAR CREM..."

EDITORIAL

The best advice is sometimes old -- and persistent -- advice

Sometimes one has to take the long view...and maintain a sharp eye.

In the 1980s, the SAB Environmental Engineering Committee (EEC), under the leadership of Dr. Ray Loehr (University of Texas) and Dr. Richard Conway (Union Carbide), reviewed a number of separate computer models that were being developed by the Agency to predict the fate and transport of chemical substances in the environment. In 1989, an EEC subcommittee, chaired by Dr. Mitchell Small (Carnegie-Mellon University), summarized much of this experience in the first-of-its-kind SAB Commentary [Modeling Resolution (EPA-SAB-EEC-89-012)]. In 11 pages of valuable -- if unsolicited -- advice, the SAB recommended a series of activities that the Agency could undertake to coordinate and integrate the production, verification, and use of computer models that were growing in sophistication and importance in environmental decisionmaking.

In the early 1990s, the Agency formed the ad hoc Agency Task Force on Environmental Regulatory Modeling (ATFERM) to react to the ideas expressed in the SAB's Commentary. When ATFERM's 1994 report was approved by Deputy Administrator Robert Sussman, the stage was set for the Agency to adopt the coordinated approach to modeling that the Board had recommended. In particular, the report called for the formation of a intra-Agency Council on Regulatory Environmental Modeling (CREM) to guide the effort.

Unfortunately, the promising initiative stalled; so, in 1995 the SAB sent another Commentary (more unsolicited advice) to the Agency (EPA-SAB-EEC-COM-95-005) urging EPA to follow through on its plans. As a direct result of this second Commentary on modeling, the Agency convened the Models 2000 Conference at the Environmental Research Laboratory in Athens, GA, in December 1997. In his kick-off

In this issue..

address to the 80 attendees at the Conference, Dr. Ishwar Murarka (EPRI), the EEC Chair at the time, reiterated the Board's recommendations over the years and encouraged the Agency to push forward with its agenda for action. As an outgrowth of the Conference, the Agency formed a Models Implementation Steering Committee, supported by ten task forces that worked on different issues related to modeling that were identified by the energetic and productive conferees.

In 1999, as a part of the Models 2000 followup effort, the SAB agreed to review the plans and charter for a revitalized CREM. The Board took the occasion to once again encourage the Agency to move forward with the good ideas that were already on the table. But in a somewhat weary, wary, and worried tone the Board's report stated: "However, the [SAB] is not convinced that EPA is fully committed and willing to launch the CREM with the level of senior management support needed for its success."

The SAB members were no doubt pleased to hear of the birth of CREM last month. Under the direction of Dr. Gary Foley, Director of the EPA Environmental Exposure Laboratory, the neonatal CREM will have senior management attention. It remains to be seen when and whether CREM can grow up to "do the job", that has become only more formidable over the intervening years. For example, even though there is now an SAB-reviewed "white paper" on criteria to guide model development across the Agency, those criteria are far from being "time-honored". And even though the Agency has made important progress in developing the next generation of multi-media, multi-pathway models, that process is not yet complete.

So the birth of CREM is indeed a happy occasion that marks a significant beginning and a real opportunity. The future will tell how well the belated arrival of CREM will enable the Agency to provide the integration and direction on models that was envisioned 11 years ago. In any event, the SAB will continue in its role of encourager and, as needed, prodder.

So, Happy Birthday, CREM; and may you have many more...real soon!

Donald G. Barnes, PhD
Staff Director
USEPA Science Advisory Board

** The views expressed in this editorial are those of the author and do not necessarily represent those of the SAB, its Members, and/or the Agency.*

TENTATIVE SAB MEETING CALENDAR FOR JUNE AND JULY

Several of the Federal Advisory Committee Act (FACA) meetings noted below have been announced in the Federal Register(FR), together with additional background information. Readers can automatically receive e-mailed copies of FR Notices by subscribing to the SAB Listserver; see Section Updates below.

If a series of meetings is anticipated, the number of the meeting in the series is indicated in parentheses; e.g., "(#2)". If a meeting is to be conducted via publicly accessible conference call, the data are enclosed in brackets: "[.....]"

A glossary of acronyms appears at the end of the list of July meetings.

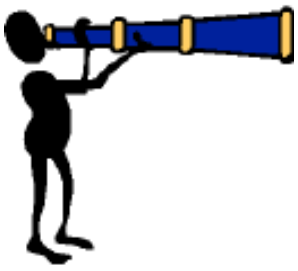
JUNE

5	Committee:	Environmental Engineering Committee (EEC) Subcommittee
	Location:	TBD
	Meeting:	Diffusion and Adoption of Innovations in Environmental Protection , Teleconference
	Chair:	*Dr. Hilary Inyang, University of Massachusetts*
	DFO:	*Dr. Angela Nugent*
	Email:	*nugent.angela@epa.gov*
5-7	Committee:	Drinking Water Committee (DWC)
	Location:	Holiday Inn Georgetown, Washington, DC
	Meeting:	Arsenic
	Chair:	*Dr. Richard Bull, Consultant*
	DFO:	*Mr. Thomas Miller*
	Email:	*miller.tom@epa.gov*
16	Committee:	Executive Committee (EC)
	Location:	Ariel Rios North, Room 6013
	Meeting:	Review Meeting, Teleconference
	Chair:	*Dr. Morton Lippmann, New York University*
	DFO:	*Dr. Donald G. Barnes*
	Email:	*barnes.don@epa.gov*

19	Committee:	Ecological Processes and Effects Committee (EPEC)
	Location:	TBD
	Meeting:	Ecological Report Card, Teleconference
	Chair:	*Dr. Terry Young, Environmental Defense Fund*
	DFO:	*Ms. Stephanie Sanzone*
	Email:	*sanzone.stephanie@epa.gov*
21	Committee:	Clean Air Scientific Advisory Committee (CASAC) Subcommittee
	Location:	Ariel Rios Building, Room 6013
	Meeting:	Federal Reference Method, Teleconference
	Chair:	*Dr. Philip Hopke, Clarkson University*
	DFO:	*Mr. A. Robert Flaak*
	Email:	*flaak.robert@epa.gov*
22-23	Committee:	Executive Committee (EC) Subcommittee
	Location:	CLOSED
	Meeting:	Scientific & Technological Achievement Awards
	Chair:	*Dr. Herb Ward, Rice University*
	DFO:	*Mr. A. Robert Flaak*
	Email:	*flaak.robert@epa.gov*
22-23	Committee:	Executive Committee (EC) Subcommittee
	Location:	Westin Grand, Washington, DC
	Meeting:	HAPS Workshop
	Chair:	*Dr. Michael Kleinman, University of California*
	DFO:	*Dr. Angela Nugent*
	Email:	*nugent.angela@epa.gov*
26	Committee:	Clean Air Scientific Advisory Committee (CASAC) Subcommittee
	Location:	Ariel Rios Building, Room 6013
	Meeting:	Teleconference, PM 2.5 Monitoring Network
	Chair:	*Dr. Joe Mauderly,*
	DFO:	*Mr. A. Robert Flaak*
	Email:	*flaak.robert@epa.gov*
28	Committee:	Environmental Engineering Committee (EEC) Subcommittee
	Location:	Ariel Rios Building, Room 5530
	Meeting:	Diffusion and Adoption of Innovations in Environmental Protection Workshop
	Chair:	*Dr. Roger Kasperson, Clark University*
	DFO:	*Dr. Angela Nugent*
	Email:	*nugent.angela@epa.gov*

JULY

10-11	Committee:	Integrated Human Exposure Committee (IHEC)
	Location:	Radisson Hotel, RTP, NC
	Meeting:	NHEXAS
	Chair:	*Dr. Henry Anderson, Wisconsin Bureau of Public Health*
	DFO:	*Mr. Samuel Rondberg*
	Email:	*SamuelR717@aol.com*
12-13	Committee:	Executive Committee (EC)
	Location:	US EPA ERC, RTP, NC
	Meeting:	Regular Meeting and Science and Stakeholder Involvement
	Chair:	*Dr. Morton Lippman, New York University*
	DFO:	*Dr. John R. Fowle III*
		Dr. Angela Nugent
	Email:	*fowle.jack@epa.gov*
		nugent.angela@epa.gov
25	Committee:	Ecological Processes and Effects Committee (EPEC)
	Location:	TBD
	Meeting:	Ecological Report Card, Teleconference
	Chair:	*Dr. Terry Young, Environmental Defense Fund*
	DFO:	*Ms. Stephanie Sanzone*
	Email:	*sanzone.stephanie@epa.gov*
28	Committee:	Clean Air Scientific Advisory Committee (CASAC)
	Location:	TBD
	Meeting:	Diesel Health Assessment II
	Chair:	*Dr. Joe Mauderly, Lovelace Respiratory Research Institute*
	DFO:	*Mr. A. Robert Flaak*
	Email:	*flaak.robert@epa.gov*



TO VIEW A TENTATIVE 6 MONTH CALENDAR CLICK HERE

OR

GO TO THE SAB WEBSITE www.epa.gov/sab/mtgcal.htm

GLOSSARY OF ACRONYMS

CASAC	Clean Air Scientific Advisory Committee
COUNCIL	(Council on Clean Air Compliance Analysis
AQMS	Air Quality Modeling Subcommittee
HEES	Health and Ecological Effects Subcommittee
DC	Washington, DC
DFO	Designated Federal Officer (SAB Staff lead)
DWC	Drinking Water Committee
EC	Executive Committee
EEAC	Environmental Economics Advisory Committee
EEC	Environmental Engineering Committee
EHC	Environmental Health Committee
EPEC	Ecological Processes and Effects Committee
IHEC	Integrated Human Exposure Committee
IRP	Integrated Risk Project
RAC	Radiation Advisory Committee
RSAC	Research Strategies Advisory Committee
RTP	Research Triangle Park, NC
SAP	Scientific Advisory Panel (FIFRA) (Not SAB affiliated)
TBA	To Be Announced

COMMITTEE ACTIVITIES IN MAY

On May 1, the Executive Committee (EC) conducted a publicly accessible conference call and approved three workproducts from its committees:

a. Drinking Water Committee's "Commentary on EPA's Draft Proposal on Long-Term 1 Enhanced Surface Water Treatment and Filter Backwash Rule"

b. Environmental Engineering Committee's "Commentary on Waste Re-use"

c. Residual Risk Subcommittee's "Advisory on USEPA's Draft Case Study Analysis of Residual Risks of Lead Smelters" subject to final approval by the vettors.

On May 1, the Natural Attenuation Subcommittee of the Environmental Engineering Committee (EEC) met by conference call. Before the scheduled meeting, two-person teams prepared and circulated preliminary responses to the four charge questions. The teams presented these orally at the conference call and the Subcommittee discussed the preliminary responses. A conference call was scheduled for May 30 to allow the Subcommittee members more time to reflect on the presentations, review the materials circulated by email, and identify any areas of disagreement.

On May 3, the Environmental Engineering Committee (EEC) met by conference call to consider the report of its Technology Evaluation Subcommittee. The Subcommittee reviewed the degree to which quality management is built into the Environmental Technology Verification (ETV) program at a public meeting March 6-8, 2000. The EEC approved the Subcommittee's report, which was subsequently approved by the Executive Committee on May 30.

On May 30, the Executive Committee (EC) conducted a publicly accessible conference call and took positive action on two reports:

a. The Drinking Water Committee's *"Science Advisory Board Report on EPA's Draft Proposal on a Groundwater Rule"*

b. The Environmental Engineering Committee (EEC): *"Review of the Agency's Environmental Technology Verification (ETV) Program"*

In addition, the EC continued its May 1 discussion on the possible need to send a Commentary.

On May 30, the Natural Attenuation Subcommittee of the Environmental Engineering Commmittee (EEC) met by conference call to consider draft materials prepared by Subcommittee members addressing the four charge questions. These materials were prepared in support of a review of EPA's natural attenuation research program to be held in Washington, DC August 14-15.

The Subcommittee found no internal contradictions in the materials prepared. Using these materials the DFO will prepare a preliminary draft for Drs. Grasso and Rittmann to polish. The polished first draft report will be sent to the Agency, the Subcommittee, and the public before the August 14-15 meeting.

SAB AND THE SOCIAL SCIENCES

On Wednesday, May 31, 2000, the SAB held the fourth lecture in its series, "Science and the Human Side of Environmental Protection." Dr. Everett Rogers, Regents' Professor, Department of Communication and Journalism, University of New Mexico, and Visiting Professor in the Center for Communications Programs, School of Public Health, Johns Hopkins University (1999-2000), gave a presentation entitled "The Diffusion of Environmental Innovations." Thirty-four people from six Headquarters Offices and two regions and an Office of Research and Development laboratory participated in the session.

Dr. Rogers presented a framework for understanding innovations that he describes in his book, "The Diffusion of Innovations." He defined diffusion as a process by which an innovation is communicated through certain channels over time among members of a social system. He described his framework as having three main components that are standard across thousands of different kinds of innovations introduced at different times and different cultures: (1) a decision process that involves the following steps: knowledge, persuasion, decision, implementation and confirmation; (2) characteristics that are common to successful innovations: relative advantage, compatibility, acceptable levels of complexity, trialability, observability, and potential for reinvention; and (3) a social system where individuals break out into the following groups, each with distinctive characteristics: innovators, early adopters, early majority, late majority and laggards. He argued that research in a variety of academic fields has identified an "s-shaped curve" that describes the rate of innovation. In every successful innovation, there is a key point where there are sufficient adopters that further diffusion is self sustaining. He described case examples as different as the adoption of different typewriter interfaces, hybrid seed corn, and testing to prevent exposure to cryptosporidium during a drinking water emergency to illustrate his framework.

Mr. Robert Brenner, Principal Deputy Assistant Administrator in the Office of Air and Radiation, had been previously invited to open the discussion with observations and questions. He suggested that Dr. Roger's model provided a focused, organized opportunity to think through how the Agency might implement innovation. He suggested that Project XL provided an example of the Agency working with innovators to demonstrate new approaches that could be adopted more broadly. He wondered how the characteristics of innovative approaches like inspection and maintenance programs, recycling, and use of catalysts helped those efforts be more or less successful, and how the Agency could learn lessons from those cases and others. He also challenged the Agency to consider how to reach out to environmental justice communities to accelerate the process of innovation and how to ensure that beneficial innovations are perceived as having a "relative advantage" in the view of potential adopters.

Questions then came from the general audience about the particular characteristics of different social groups in the adoption process, and strategies for how the Agency might accelerate the "s-curve" standard to the adoption process. The group discussed working with opinion leaders and changing perceptions over time through conscious use of communication networks. A question from the regional audience addressed the special problem of innovation in EPA regions. Dr. Rogers responded that, depending on the freedom possessed by the Regions, there may be patterns influenced by internal social processes, EPA Headquarters, or dynamics where some EPA regions may assume innovator roles within EPA's 10-region structure. One question challenged Dr. Rogers

to address the unspoken role of accidents, random and chance events in the Framework and Dr. Rogers acknowledged the need to do so in the next edition of his book. The final question addressed innovations within organizations. Dr. Rogers suggested that the most likely dynamic would be an "s-shaped" curve identifying the critical zone where each individual would know enough people similar to themselves who have adopted the innovation.

The SAB plans to host lectures on the social sciences on a periodic basis to highlight how the social sciences can help solve actual environmental problems. If you have suggestions for future speakers or topics, please contact Angela Nugent (202-564-4562 or nugent.angela@epa.gov).

SAB Reports in Progress

a *PROJECTS SCHEDULED FOR JUNE 16 EC TELECONFERENCE MEETING*

EC Subcommittee

1) Review of Air Toxics Monitoring Strategy
2) Review of Children's Cancer
3) Review of the Use of Data from the Testing of Human Subjects

b *PROJECTS SCHEDULED FOR JULY 12-13 EC MEETING*

EEAC

1) Review of Benefits Adjustments White Paper

EC Subcommittee

2) Review of the Scientific and Technological Achievement Awards

RAC

3) Advisory on Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM)

c *PROJECTS DUE FOR LATER EC MEETINGS*

EEC

1) Review of Natural Attenuation
2) Commentary on the Measures of Environmental Technology Performance
3) Commentary on the Use of Social Sciences to Reduce Barriers to Pollution Prevention

RAC

4) Advisory on GENII Version 2.0

d *PROJECTS THAT DO NOT REQUIRE EC APPROVAL*

CASAC Subcommittee

1) Advisory on PM2.5 Monitoring Network

e *PROJECTS THAT HAVE RECEIVED EC APPROVAL AND AWAIT COMPLETION*

DWC

1) Groundwater Proposed Rule

EEC

2) Commentary on Waste Re-Use

EEC Subcommittee

3) Review of Environmental Technology Verification

EC/IRP/SC

4) Review of IRP Final Overview Report

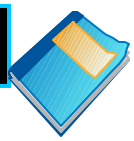
IRP/EEC

5) Review of IRP Risk Reduction Report

RAC

6) Review of Assessment of Risks from Radon in Homes

ABSTRACTS OF NEW REPORTS



a Comments on EPA's Long-Term 1 Enhanced Surface Water Treatment and Filter Backwash Rule
EPA-SAB-DWC-COM-00-004

The Drinking Water Committee (DWC) of the Environmental Protection Agency's (EPA) Science Advisory Board (SAB) met in Washington, D.C. on March 13, 2000 to review the Agency's Draft Proposal for the Long-Term 1 Enhanced Surface Water Treatment and Filter Backwash Rule (LT1FBR). The rule is intended to increase protection against microbial contamination (especially *Cryptosporidium*) in finished drinking water supplies from systems using surface water or ground water under the direct influence of surface water. The Committee conducted this review in fulfillment of its responsibilities under Section 1412(e) of the Safe Drinking Water Act (SDWA as amended in August 1996). Key points raised by the Committee include:

a. Long Term 1 Rule:

Turbidity Requirements - Combined Filter Effluent in Small Plants: EPA should outline further measures that it will take to ensure that the desired level of performance can be successfully achieved.

Turbidity Requirements - Collection of Data by Small Systems: The SAB sees no technical problem with small utilities maintaining continuous monitoring equipment that stores and reports on turbidity data at 15 minute intervals.

b. Filter Backwash Proposal

Issues of where to return the backwash flow in conventional plants: EPA should conduct studies to determine if gravity settling of washwater return flows is sufficient or if additional treatment is required. If studies reveal problems, then more specific requirements for treatment of backwash water should be considered. Based on the evidence now available, the SAB recommends against requiring that washwaters be recycled ahead of the point of coagulant addition. Based on the information currently available, the SAB recommends against requirements which would alter the design of these direct recycle processes.

Determining if a Water Treatment Plant is Exceeding Its Capacity: EPA should require monitoring of performance parameters, like settled water turbidity and filtered water turbidity instead of trying to determine capacity.

When is it Most Appropriate to Monitor? EPA should require monitoring during periods of the year when unit processes are known to perform poorly instead of focusing on high periods of demand alone.

Is Limiting the Self-assessment to Plants with Less Than 20 Filters Appropriate? EPA should require all plants to do a self-assessment, no matter how many filters they have.

Requirements for Direct Filtration Plants: EPA should study the treatment of recycled flows in direct filtration plants in order to determine the level of treatment that is appropriate in light of requirements for Cryptosporidium removal.

c. Economic Assessment

Estimating Illness Avoided: EPA should give special attention to the control of outbreaks as well as endemic disease.

b **An SAB Advisory on the Agency's "Total Risk Integrated Methodology" (TRIM)**

EPA-SAB-EC-ADV-00-004

The Environmental Models Subcommittee of the EPA Science Advisory Board (SAB) reviewed the Agency's development of the Total Risk Integrated Methodology (TRIM) for predicting multimedia exposures and risks posed by hazardous air pollutants. The Subcommittee found the EPA TRIM model to be an innovative, flexible, state-of-the-art system for evaluating multimedia chemical fate, transport, exposure and risk. Specific recommendations are provided on efforts to improve the TRIM.FaTE module, planned field comparison studies of the TRIM system, and the design and implementation of the exposure and risk modules.

The Subcommittee determined that there is a need for OAQPS to better specify its plans and timeline for use of the TRIM system within the Agency and subsequent release to a broader user community. Early workshops and beta testing of the integrated TRIM system by the affected user community are recommended to help in the development of user guidance and support. The application protocol for TRIM should provide incentives for the development of improved data collection methods and improved databases for model input. For all current risk assessment models, including the TRIM system, new methods are needed to address emerging issues including: the effects of mixtures; population susceptibility and cumulative risk; and metrics for environmental equity and ecological impacts at the population level.

c **Science Advisory Board Advisory on the USEPA's Draft Case Study Analysis of the Residual Risk of Secondary Lead Smelters**

EPA-SAB-EC-ADV-00-005

The Residual Risk Subcommittee of the Science Advisory Board's (SAB) Executive Committee met on March 1-2, 2000 to review the U.S. Environmental Protection Agency's interim draft Residual Risk Analysis on Secondary Lead Smelters.

The Subcommittee concludes that the Agency has developed a useful, self-described "work-in progress". The methodology used in this interim workproduct, as far as it currently goes, is consistent with the methodology described in the Report to Congress. Further, the assumptions used are consistent with current methods and practice. The case study provides a valuable example of how the approach presented in the Report is going to be implemented.

However, because the Subcommittee has not yet seen a full residual risk analysis and, thus, is unable to comment on the complete process, a number of important concerns were identified that should be addressed. Specifically, this interim analysis does not include the following important elements: an ecosystem risk assessment; a health risk assessment that includes populations risks; a full uncertainty/variability analysis; and a computer model for assessing multimedia transport and fate that has been adequately evaluated.

The Advisory addresses specific charge questions dealing with the following: models and model inputs, choice of receptors, ecological and human health risk assessment, uncertainty and variability assessment, and presentation of results.

UPDATES

a) Annual Report

The FY 1999 Annual Report of the SAB Staff, entitled "Science Advisory Board FY 1999 Annual Staff Report: New Wineskins for New Wine," is available for distribution by contacting

Ms. Vickie Richardson at
Phone: 202-564-4553
Email: richardson.vickie@epa.gov

This report provides a handy desk reference for SAB information. It includes

1) A brief history of the SAB
2) A summary of FY 1999 activities
3) A list of FY 1999 Members and Consultants
4) List of all FY 1999 reports, with Abstracts
5) And much, much more!

b) Computer News:

(1) SAB Website within the EPA Home Page. You are invited to visit the SAB Website at URL:

http://www.epa.gov/sab

The site offers such features as

(a) Full-text reports for FY1994-FY2000
(b) Background information about the structure, function, and membership of the SAB
(c) A rolling two-month calendar of SAB meetings
(d) The most current issue of HAPPENINGS
(e) Draft/final agendas of upcoming meetings and draft/final minutes of past meetings.
(f) And much, much...well, maybe a little bit more!

(2) SAB Listserver - By subscribing to the free SAB Listserver, you will automatically receive copies of all Federal Register notices announcing SAB meetings, together with brief descriptions of the topics to be covered at the meetings. These notices will be e-mailed to you within 24-hours of their publication in the Federal Register.

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c) Obtaining copies of SAB reports:

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Phone: (202) 564-4541

Email: hinds.nicole@epa.gov or by faxing your request to (202) 501-0256

THE BOARD BIO

In this month's Board bio we'd like to introduce you to Christine Lorraine Moe, a member of the Drinking Water Advisory Committee. She wears many other hats too working as an Assistant Professor in the Department of Epidemiology at the University of North Carolina at Chapel Hill in Chapel Hill, NC and also provides Environmental Epidemiologic support to the Health Studies Branch in the Center for Environmental Health at the Centers for Disease Control and Prevention in Atlanta, GA.

Dr. Moe studies the environmental transmission of infectious agents, especially those transmitted by water and food. In her work she applies molecular biology to epidemiology studies that range from human challenge studies of infectious dose of enteric pathogens to microbial contamination of produce from the US-Mexico border, and effectiveness of sanitation systems in El Salvador. She served as a consultant to U.S. Dept. of Justice, Environment and Natural Resources Division Environmental Enforcement Section, Washington, DC and to the Department of Medical Virology at the University of Pretoria in Pretoria, South Africa, the International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh and the Caribbean Environment Programme in Kingston, Jamaica which is part of the United Nations Environment Programme.

Dr. Moe graduated from Swarthmore College and then earned her MS and Ph.D. from the University of North Carolina, Chapel Hill, NC. She is a member of the American Society for Microbiology, the American Society for Virology, Sigma Xi and Delta Omega (the Honorary Public Health Society).

In addition to her service on the SAB she has served on various other national level advisory committees including the National Research Council and the American Water Works Association Research Foundation, Research Advisory Council.

Christine currently divides her time between the University of North Carolina in Chapel Hill and the Centers for Disease Control and Prevention in Atlanta. She is married and has two young sons who refer to CDC as "the germ factory".

MEMBERS/CONSULTANTS/STAFF NEWS

Staff News 

Don Barnes participated in an OECD Workshop on the convergence of Risk Assessment and Socioeconomic Analysis to Better Inform Chemical Risk Management Decisions. He co-chaired one of four small groups that examined the similarities and differences between scientific risk assessment/risk management and socio-economic analysis, both of which are critical to environmental decision making. The discussion was germane to recent work of the Board's EEAC and the Integrated Risk Project, as well as the SAB's upcoming Workshop on Valuation.

Don Barnes published a paper in the Journal of Applied Toxicology (vol 20, p. 127+, 2000) in which he presented a scenario of how the Agency might react if it were shown scientifically that hormesis (i.e., a "J-shaped" dose-response curve) was a proven phenomenon.

Jack Fowle, Karen Martin and Vickie Richardson were honored at the Agency's Unsung Heroes Program for volunteering as reading mentors to at-risk children in the Everybody Wins Power Lunch Program at Anthony Bowen Elementary School.

Betty Fortune was presented with a certificate in recognition of her contributions to the SAB, most notably the Executive Committee.

SAB Staff (Don Barnes, Bob Flaak, Jack Fowle, Tom Miller, Diana Pozun, Pat Thomas, and Vickie Richardson) shared "Best (and Pretty Good) Practices of the SAB" with their colleagues from other FACA committees at the May meeting of the Agency's DFO NETWORK. The audience reacted favorably to a number of the Board's efforts, including reaching out to Members and the public, engendering responses from the Agency, and recruiting/enlisting Members and Consultants.

It's taken some getting used to referring to Vickie Richardson as "Master", but it is appropriate, ever since she received her Master's Degree in Public Administration from the George Washington University on May 21, 2000. Congratulations, Oh Master!:)

It's been a little easier dealing with Nicole Hinds, our student intern who has been with us for the past 16 months. On May 25, 2000, she received her Bachelor of Science in environmental engineering from the University of Maryland. She has accepted a position with Christopher Consultants, a civil engineering firm, in Sterling, VA. Congratulations, Oh Bachelor?!:)

BON MOT

DEVELOPMENTS IN THE FIELD OF HELLOLOGY

Scientists have made great advances the field of cosmology in just the past 20 years. As a result of this research, various predictions have been made about the ultimate fate of the universe; e.g, continuous expansion, expansion followed by contraction (the Big Crunch), etc. While the cosmos and its future have been figuratively put under a microscope, comparatively little scientific effort has been devoted to the future of Hell, which should be arguably of greater interest of many of our gentle readers.

However, the emerging field of Hellology is beginning to correct this imbalance. For example, an extra-credit question appeared on a mid-term chemistry exam at the University of Washington asking: "Is Hell exothermic or endothermic?" A budding Hellologist reasoned as follows...

According to many independent observers the world is going to Hell in a handbasket. As a result, we can expect the population of Hell to experience population growth similar the one that we have been experiencing on earth. Therefore, there are two possibilities:

1. If the population of Hell grows more rapidly than Hell can expand to accommodate the increasing numbers, then the temperature and pressure will rise continuously and exothermically until all Hell breaks loose.
2. If, on the other hand, the rate of expansion of Hell exceeds the influx of additional souls, then the temperature and pressure will fall inexorably and endothermically until Hell freezes over.